

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
3 February 2005 (03.02.2005)

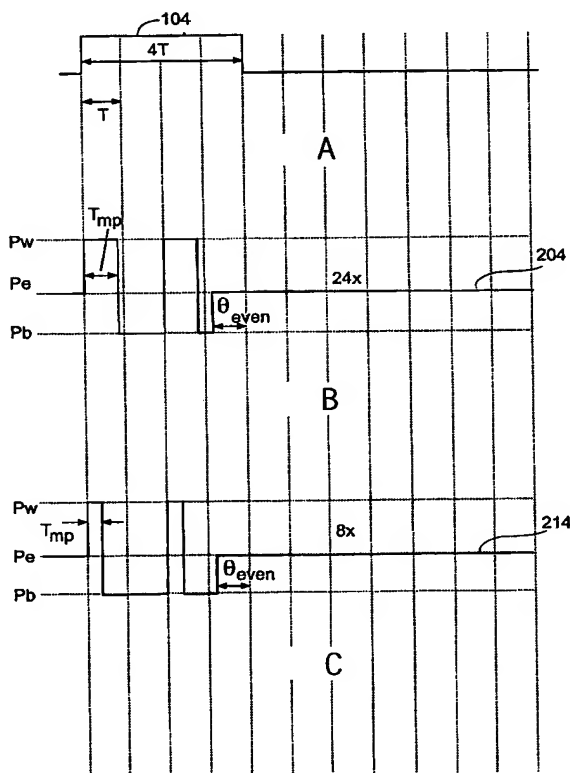
PCT

(10) International Publication Number  
**WO 2005/010873 A1**

- (51) International Patent Classification<sup>7</sup>: **G11B 7/006**
- (21) International Application Number:  
**PCT/IB2004/051245**
- (22) International Filing Date: **16 July 2004 (16.07.2004)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:  
**03102278.3** **24 July 2003 (24.07.2003)** **EP**
- (71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL];**  
**Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).**
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **TIEKE, Benno**  
**[DE/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven**  
**(NL). VAN DER VLEUTEN, Maarten [NL/NL]; c/o**  
**Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).**
- (74) Agent: **UITTENBOGAARD, Frank; Prof. Holstlaan 6,**  
**NL-5656 AA Eindhoven (NL).**
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): **ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).**

[Continued on next page]

(54) Title: **METHOD AND DEVICE FOR TRANSFORMING A FIRST SET OF WRITE PARAMETERS OF A WRITE STRATEGY INTO A SECOND SET OF WRITE PARAMETERS AT A DIFFERENT RECORDING SPEED**



(57) Abstract: The present invention relates to a method and a corresponding device for transforming a first set of write parameters (W) of a write strategy, in particular a 2T write strategy, for recording marks in an information layer (301) of a record carrier (30) by irradiating the information layer (301) with a pulsed radiation beam (32) at a first recording speed (R) into a second set of write parameters (W') of said write strategy for recording marks at a second recording speed (R'), T representing the length of one period of a reference clock. In order to achieve an at least acceptable recording performance at the second recording speed, it is proposed according to the present invention that the duration of the write pulses is kept substantially constant in time, and the duration of a complete sequence of write pulses for recording a mark is kept substantially constant as a fraction of the reference clock T.

WO 2005/010873 A1

**Declaration under Rule 4.17:**

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ,

BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

**Published:**

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.